

Appl. No. : 10/627,576  
Filed : July 24, 2003

### AMENDMENTS TO THE CLAIMS

1. (Original) A method of manufacturing a semiconductor device, the method comprising:

- (a) forming a porous semiconductor layer in the form of a thin film on an original substrate, the forming being immediately followed by
- (b) separating the thin film by a lift-off process from the original substrate;
- (c) transferring the thin film to a dummy support, the thin film not being attached to the dummy support;
- (d) fabricating a device on top of the thin film; and
- (e) attaching the thin film with the device fabricated on the thin film to a foreign substrate.

2. (Original) The method according to Claim 1, wherein (c) and (d) are performed twice, such that the device is fabricated and attached on a first side of the thin film and a second device is fabricated and attached on a second side of the thin film.

3. (Original) The method according to Claim 1, wherein the fabricating comprises at least the deposition of an active semiconductor layer on the thin film.

4. (Original) The method according to Claim 3, wherein the deposition of the active semiconductor layer is performed by epitaxial Chemical Vapor Deposition.

5. (Original) The method according to Claim 1, wherein the transferred device is a non-finished device that is further finished after attachment to the foreign substrate.

6. (Original) The method according to Claim 1, wherein the lift-off process is achieved by immersing the substrate in a HF solution in concentration between 12 and 35% and using current densities between 50 and 250 mA/cm<sup>2</sup> without changing any other parameters.

7. (Original) The method according to Claim 1, wherein the porous semiconductor layer is a double layer of crystalline or amorphous semiconductor material including silicone germanium, III-V materials such as Ga As, InGaAs and semiconducting polymers.

8. (Original) The method according to Claim 1, wherein the foreign substrate comprises a low-cost substrate.

9-13. (Canceled)

14. (Original) A method of manufacturing a thin film device comprising:

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fabricating a device on a free-standing thin film; and  
depositing the thin film device on a substrate.

15. (Original) The method of Claim 14, wherein the free-standing thin film is on an intermediate substrate during fabricating and the method further comprises removing the thin film device from the intermediate substrate.

16. (Original) The method of Claim 14, wherein the thin film device is a solar cell.

17. (Original) The method of Claim 14, wherein the substrate comprises glass.

18. (Original) A method of manufacturing a thin film device comprising:  
forming a thin film on an original substrate;  
separating the thin film from the original substrate;  
transferring the thin film to a dummy support so that the thin film is free-standing;  
forming an active layer on the thin film; and  
attaching the active layer and the thin film to a foreign substrate.

19. (Original) The method of Claim 18, wherein attaching comprises bonding the active layer and the thin film to the foreign substrate.

20. (Original) The method of Claim 18, wherein forming of the active layer is performed using chemical vapor deposition.

21. Canceled.